# Defense Advanced Research Projects Agency (DARPA) DoD 23.4 Small Business Innovation Research (SBIR) Annual BAA Proposal Submission Instructions Release 12

#### INTRODUCTION

To achieve DARPA's mission to create technological surprise, the agency makes strategic, early investments in science and technology that will have long-term positive impacts on our national security. The pace of discovery in both science and technology is accelerating worldwide, resulting in new fields of study and the identification of scientific areas ripe for small business utilization through the SBIR and STTR programs. Small businesses are critical for developing technology to support national security. Proposers are encouraged to consider whether the R/R&D being proposed to DoD Components also has private sector potential, either for the proposed application or as a base for other applications. The topics below focus on technical domains important to DARPA's mission pursuing innovative research concepts that fall within one of its technology offices. More information about DARPA's technical domains and research topics of interest may be found at: http://www.darpa.mil/about-us/offices.

Proposers responding to a topic in this BAA must follow all general instructions provided in the Department of Defense (DoD) SBIR Program BAA. DARPA requirements in addition to or deviating from the DoD Program BAA are provided in the instructions below.

# <u>Proposers are encouraged to thoroughly review the DoD Program BAA and register for the DSIP</u> Listsery to remain apprised of important programmatic and contractual changes.

• The DoD Program BAA is located at: <a href="https://www.defensesbirsttr.mil/SBIR-STTR/Opportunities/#announcements">https://www.defensesbirsttr.mil/SBIR-STTR/Opportunities/#announcements</a>. Be sure to select the tab for the appropriate BAA cycle. Register for the DSIP Listserv at: <a href="https://www.dodsbirsttr.mil/submissions/login">https://www.dodsbirsttr.mil/submissions/login</a>

Specific questions pertaining to the administration of the DARPA Program and these proposal preparation instructions should be directed to: DARPA Small Business Programs Office at <a href="SBIR\_BAA@darpa.mil">SBIR\_BAA@darpa.mil</a>. DSIP Topic Q&A will NOT be available for these DARPA topics. Technical questions related to improving the understanding of a topic's requirements must be submitted to <a href="SBIR\_BAA@darpa.mil">SBIR\_BAA@darpa.mil</a> by the deadline listed below.

The following dates apply to this DARPA Topic release:

August 03, 2023: Topic issued for pre-release
August 22, 2023: Topic opens; DARPA begins accepting proposals via DSIP
September 14, 2023: Deadline for technical question submission
September 21, 2023: Deadline for receipt of proposals no later than 12:00 pm ET

### DIRECT TO PHASE II PROPOSAL GUIDELINES

Proposers should refer to the DARPA Direct to Phase II SBIR XL Proposal Instructions, provided in Appendix A.

#### **Current Release Award Structure**

Topic Number	Direct to Phase II					
	Technical Volume			Period of		
	White	Slide	Award	Performance	Option	Option
	Paper	Deck	Amount	(PoP)	Amount	Period
HR0011SB20234XL-05	20 pages	15 pages	\$1,000,000	6 months	\$3,000,000	6 months

\*\*For this topic DARPA will accept DP2 proposals with a total maximum cost/price of \$4,000,000. This maximum cost/price includes a 6-month base period not to exceed \$1,000,000 and a 12-month Option minimum of \$2,000,000. The base period and the minimum funding for the Option (if exercised) are funded entirely by DARPA. Additionally, if the Option is exercised, DARPA is encouraging the performer to arrange additional program funding with a commercial or government (non-DARPA) partner of up to \$500,000. Any proposed non-DARPA funding agreement must be written, signed, and received by DARPA 60 calendar days before the last day of the period of performance of the base period to permit DARPA sufficient time to access as part of the determination to award the Option effort. DARPA will match up to \$500,000 of non-DARPA funds under a written, signed, and timely submitted agreement. Securing a non-DARPA funding agreement does not obligate DARPA to exercise the Option effort, nor will the lack of a written funding agreement prevent the performer from receiving an Option. DARPA will make option award decisions based on performance and funding availability.

Note: Please see Appendix A section III (d) for complete instructions on the White Paper/Slide Deck technical volume format.

#### **Content of the Technical Volume**

Proposers should refer to the DARPA DP2 Proposal Instructions, provided in Appendix A and on the DARPA Small Business site (<a href="https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program">https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program</a>).

### **Cost Volume (Volume 3)**

Please see the chart above for award amounts listed by topic. Proposers are required to use the Direct to Phase II – Volume 3: Cost Proposal Template (Excel Spreadsheet) provided on the DARPA Small Business site (<a href="https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program">https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program</a>). Subcontractors may also submit unsanitized costs using this template directly to DARPA at <a href="mailto:SBIR-BAA@darpa.mil">SBIR-BAA@darpa.mil</a>.

Please review the updated Percentage of Work (POW) calculation details included in the DoD Program BAA. DARPA will occasionally accept deviations from the POW requirements with a letter of explanation or approval from the Funding Agreement officer.

# **Company Commercialization Report (CCR) (Volume 4)**

Completion of the CCR as Volume 4 of the proposal submission in DSIP is required. Please refer to the DoD SBIR Program BAA for full details on this requirement. Information contained in the CCR will not be considered by DARPA during proposal evaluations.

# **Supporting Documents (Volume 5)**

In addition to the documents required by DoD, small businesses may also submit additional documentation to support the Technical Volume (Volume 2) and the Cost Volume (Volume 3) in Volume 5. Firms should fill out and upload the DARPA SBIR XL Milestones Template found on the DARPA Small Business website under SBIR/STTR BAA FORMS & TEMPLATES at

https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program. See Appendix A for required certifications that must be included in Volume 5. For additional information, see the SBIR 23.4 Annual Program Broad Agency Announcement (BAA) at https://www.defensesbirsttr.mil/SBIR-STTR/Opportunities/.

# DISCRETIONARY TECHNICAL AND BUSINESS ASSISTANCE (TABA)

DARPA does not offer TABA funding.

# **EVALUATION AND SELECTION**

All proposals will be evaluated in accordance with the evaluation criteria listed in the DoD SBIR 2023.4 BAA. DARPA will conduct an evaluation of each conforming proposal. Proposals that do not comply with the requirements detailed in this BAA and the research objective(s) of the corresponding topic are considered non-conforming and therefore are not evaluated nor considered for award.

Using the evaluation criteria, the Government will evaluate each proposal in its entirety, documenting the strengths and weaknesses relative to each evaluation criterion, and, based on these identified strengths and weaknesses, determine the proposal's overall selectability. Proposals will not be evaluated against each other during the evaluation process, but rather evaluated on their own individual merit to determine how well the proposal meets the criteria stated in this BAA and the corresponding DARPA topic.

Awards will be made to proposers whose proposals are determined to be the most advantageous to the Government, consistent with instructions and evaluation criteria specified in the DoD SBIR 2023.4 BAA and availability of funding. Given the limited funding available for each topic released, not all proposals considered selectable will be selected for funding.

For the purposes of this proposal evaluation process, a selectable proposal is defined as follows:

<u>Selectable</u>: A selectable proposal is a proposal that has been evaluated by the Government against the evaluation criteria listed in the DoD SBIR 2023.4 BAA and DARPA topic, and the strengths of the overall proposal outweighs its weaknesses. Additionally, there are no accumulated weaknesses that would require extensive negotiations and/or a resubmitted proposal.

For the purposes of this proposal evaluation process, a non-selectable proposal is defined as follows:

<u>Non-Selectable</u>: A proposal is considered non-selectable when the proposal has been evaluated by the Government against the evaluation criteria listed in the DoD SBIR 2023.4 BAA and DARPA topic, and the strengths of the overall proposal do not outweigh its weaknesses.

Proposing firms will be notified of selection or non-selection status for a Phase I award within 90 days of the closing date of the DoD SBIR 2023.4 BAA. It is the policy of DARPA to treat all proposals as source selection information and to disclose their contents only for the purpose of evaluation. Restrictive notices notwithstanding, during the evaluation process, submissions may be handled by support contractors for administrative purposes and/or to assist with technical evaluation. All DARPA support contractors are expressly prohibited from performing DARPA-sponsored technical research and are bound by appropriate nondisclosure agreements. Input on technical aspects of the proposals may be solicited by DARPA from other Government and/or non-Government consultants/experts who are strictly bound by the appropriate non-disclosure requirements. No submissions will be returned. Upon completion of the evaluation and selection process, an electronic copy of each proposal received will be retained at DARPA.

Proposal titles, abstracts, anticipated benefits, and keywords of proposals that are selected for contract award will undergo a DARPA Policy and Security Review. Proposal titles, abstracts, anticipated benefits, and keywords are subject to revision and/or redaction by DARPA. Final approved versions of proposal titles, abstracts, anticipated benefits, and keywords may appear on the DoD SBIR/STTR awards website and/or the SBA's SBIR/STTR award website (https://www.sbir.gov/sbirsearch/award/all).

Refer to the DoD SBIR 2023.4 Program BAA for procedures to protest the Announcement. As further prescribed in FAR 33.106(b), FAR 52.233-3, Protests regarding the selection decision should be submitted to:

DARPA Contracts Management Office (CMO) 675 N. Randolph Street Arlington, VA 22203

E-mail: scott.ulrey@darpa.mil and sbir@darpa.mil

# AWARD AND CONTRACT INFORMATION

#### 1. General Award Information

Multiple awards are anticipated. DARPA may award FAR-based government contracts (Firm-Fixed Price or Cost-Plus Reimbursement) or Other Transactions for Prototypes agreement (under the authority of 10 U.S.C. § 4022) subject to approval of the Contracting Officer. The amount of resources made available for each topic issued under this BAA will depend on the quality of the proposals received and the availability of funds.

Majority Ownership in Part. Proposers that are more than 50% owned by multiple venture capital operating companies (VCOC), hedge funds (HF), private equity firms (PEF), or any combination of these as set forth in 13 C.F.R. § 121.702, are eligible to submit proposals in response to DARPA topics advertised within this BAA.

For proposers that are a member of this ownership class the following must be satisfied for proposals to be accepted and evaluated:

- a. Prior to submitting a proposal, firms must register with the SBA Company Registry Database. b. The proposer within its submission must submit the Majority-Owned VCOC, HF, and PEF Certification. A copy of the SBIR VC Certification can be found on <a href="https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program">https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program</a>, under SBIR/STTR BAA Forms. Include the SBIR VC Certification in the Supporting Documents (Volume 5).
- c. Should a proposer become a member of this ownership class after submitting its proposal and prior to any receipt of a funding agreement, the proposer must immediately notify the Contracting Officer, register in the appropriate SBA database, and submit the required certification which can be found under SBIR/STTR BAA Forms and Templates on <a href="https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program">https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program</a>.

The Government reserves the right to select for negotiation all, some, one, or none of the proposals received in response to this announcement and to make awards with or without communications with proposers. Additionally, the Government reserves the right to award all, some, one, or none of the options on the contract(s)/agreement(s) of the performers based on available funding and technical performance. If warranted, portions of resulting awards may be segregated into pre-priced options. Additionally, DARPA reserves the right to accept proposals in their entirety or to select only portions of proposals for award. In the event that DARPA desires to award only portions of a proposal, negotiations may be opened

with that proposer. The Government reserves the right to fund proposals in phases with options for continued work, as applicable.

The Government reserves the right to request any additional, necessary documentation once it makes the award instrument determination. The Government reserves the right to remove a proposal from award consideration should the parties fail to reach agreement on award terms, conditions, and price within a reasonable time, and/or the proposer fails to provide requested additional information within three business days.

In all cases, the Government Contracting Officer reserves the right to select award instrument type, regardless of instrument type proposed, and to negotiate all instrument terms and conditions with selectees. DARPA will apply publication or other restrictions, as necessary, if it determines that the research resulting from the proposed effort will present a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense. Any award resulting from such a determination will include a requirement for DARPA permission before publishing any information or results on the program. For more information on publication restrictions, see the DoD SBIR 2023.4 BAA.

Because of the desire to streamline the award negotiation and program execution process, proposals identified for negotiation will result in negotiating a type of instrument for award that is in the best interest of the Government. In the case of an OT for Prototype agreement under DARPA's authority to award OTs for prototype projects, 10 U.S.C. § 4022, use of an OT provides significant opportunities for flexible execution to assist in meeting DARPA's aggressive SBIR/STTR program goals.

All proposers that wish to consider an OT award should carefully read the following:

The flexibility of the OT award instrument is beneficial to the program because the Performer will be able to apply its best practices as required to carry out the research project that may be outside of the Federal Acquisition Regulation (FAR) process-driven requirements. Streamlined practices will be used, such as milestone-driven performance, intended to reduce time and effort on award administration tasks and permit performers to focus on the research effort and rapid prototyping. Because of this ability, OTs provide the Agreements Officer the flexibility to create an award instrument that contains terms and conditions that promote commercial transition, reduce some administratively burdensome acquisition regulations, and meet SBIR/STTR program goals.

Proposers must only propose an OT agreement with fixed payable milestones. Fixed payable milestones are fixed payments based on successful completion of the milestone accomplishments agreed to in the milestone plan. Refer to the Other Transactions for Prototypes Fact Sheet and Other Transaction for Prototype Agreement, available at <a href="https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program">https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program</a>. Specific milestones will be based upon the research objectives detailed in the topic.

Please see <a href="https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program">https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program</a> for more information on OTs.

# 2. Transition and Commercialization Support Program (TCSP)

DARPA will provide services to Phase II or DP2 awardees upon contract execution through the Transition and Commercialization Support Program (TCSP) at no cost to awardees. The TCSP goal is to maximize the potential for SBIR/STTR companies to move their technology beyond Phase II and into other research and development programs for further maturity or into solutions or products for DoD acquisition programs, other Federal programs, and/or the commercial market. Please visit

<u>https://www.darpa.mil/work-with-us/for-small-businesses/commercialization-continued</u> for more information on DARPA TCSP.

# 3. Embedded Entrepreneurship Initiative

Awardees of SBIR funding pursuant to this BAA may be eligible to participate in the DARPA Embedded Entrepreneurship Initiative (EEI) during the Period of Performance. Invitation to participate in EEI is at the sole discretion of the Government based on evaluation of technical and commercial factors and subject to program balance and the availability of funding. EEI is a limited scope program offered by DARPA, at DARPA's discretion, to a small subset of awardees. The goal of DARPA's EEI is to increase the likelihood that DARPA-funded technologies take root in the U.S. and provide new capabilities for national defense. EEI supports DARPA's mission "to make pivotal investments in breakthrough technologies and capabilities for national security" by accelerating the transition of innovations out of the lab and into new capabilities for the Department of Defense (DoD). EEI investment supports development of a robust and deliberate Go-to-Market strategy for selling technology product to the government and commercial markets and positions DARPA awardees to attract U.S. investment. The following is for informational and planning purposes only and does not constitute solicitation of proposals to the EEI.

There are three elements to DARPA's EEI: (1) A Senior Commercialization Advisor (SCA) from DARPA who works with the Program Manager (PM) to examine the business case for the awardee's technology and uses commercial methodologies to identify steps toward achieving a successful transition of technology to the government and commercial markets; (2) Connections to potential industry and investor partners via EEI's Investor Working Groups; and (3) Additional funding on an awardee's contract for the awardee to hire an embedded entrepreneur to achieve specific milestones in a Go-to-Market strategy for transitioning the technology to products that serve both defense and commercial markets. This embedded entrepreneur's qualifications should include business experience within the target industries of interest, experience in commercializing early-stage technology, and the ability to communicate and interact with technical and non-technical stakeholders. Funding for EEI is typically no more than \$250,000 per awardee over the duration of the award. An awardee may apportion EEI funding to hire more than one embedded entrepreneur, if achieving the milestones requires different expertise that can be obtained without exceeding the awardee's total EEI funding. The EEI effort is intended to be conducted concurrent with the research program without extending the period of performance.

# EEI Application Process:

After receiving an award under the solicitation, awardees interested in being considered for EEI should notify their DARPA Program Manager (PM) during the period of performance. Timing of such notification should ideally allow sufficient time for DARPA and the awardee to review the awardee's initial transition plan, identify milestones to achieve under EEI, modify the award, and conduct the work required to achieve such milestones within the original award period of performance. These steps may take 9-18 months to complete, depending on the technology. If the DARPA PM determines that EEI could be of benefit to transition the technology to product(s) the Government needs, the PM will refer the performer to DARPA Commercial Strategy.

DARPA Commercial Strategy will then contact the performer, assess fitness for EEI, and in consultation with the DARPA technical office, determine whether to invite the performer to participate in the EEI. Factors that are considered in determining fitness for EEI include DoD/Government need for the technology; competitive approaches to enable a similar capability or product; risks and impact of the Government's being unable to access the technology from a sustainable source; Government and commercial markets for the technology; cost and affordability; manufacturability and scalability; supply chain requirements and barriers; regulatory requirements and timelines; Intellectual Property and Government Use Rights, and available funding.

Invitation to participate in EEI is at the sole discretion of DARPA and subject to program balance and the availability of funding. EEI participants' awards may be subsequently modified bilaterally to amend the Statement of Work to add negotiated EEI tasks, provide funding, and specify a milestone schedule which will include measurable steps necessary to build, refine, and execute a Go-to-Market technology transition plan aimed at delivering new capabilities for national defense. Milestone examples are available at: <a href="https://www.darpa.mil/work-with-us/contract-management">https://www.darpa.mil/work-with-us/contract-management</a>.

Awardees under this solicitation are eligible to be considered for participation in EEI, but selection for award under this solicitation does not imply or guarantee participation in EEI.

For more information please refer to the EEI website https://eei.darpa.mil/.

#### 4. DARPA Toolbox Initiative

DARPA Toolbox is an Agency-wide effort to provide open licensing opportunities with commercial technology vendors to the researchers behind DARPA programs. DARPA Toolbox provides easy, low-cost, scalable access to state-of-the-art tools and intellectual property (IP) under predictable legal terms and streamlined acquisition procedures. The goal is to reduce performer reliance on low-quality, low-cost tools and IP that increase execution risks and complicate post-DARPA transitions.

Through this initiative, DARPA performers are granted access to select vendor tools and technologies throughout the life of their contractual relationship with the Agency. The Toolbox suppliers bring to the table proven technologies commonly used in state-of-the art commercial microelectronics or system design methodologies.

DARPA Toolbox program information and a full list of participating suppliers can be found at <a href="https://www.darpa.mil/work-with-us/darpa-toolbox-initiative">https://www.darpa.mil/work-with-us/darpa-toolbox-initiative</a>. If there are tool or technologies of interest, contact the Supplier POC listed for the product, referencing the DARPA Toolbox Initiative. The Supplier POC will provide advice on products and pricing information. Include any non-production pricing quotes in your proposal. Products and pricing are between you and the suppliers – *do not* contact DARPA directly.

#### ADDITIONAL INFORMATION

DARPA intends to use electronic mail for all correspondence regarding these topics. Questions related to the technical aspect of the research objectives and awards specifically related to a topic should be emailed to <a href="mailto:SBIR\_BAA@darpa.mil">SBIR\_BAA@darpa.mil</a>. Please reference the topic number in the subject line. All questions must be in English and must include the name, email address, and the telephone number of a point of contact.

DARPA will attempt to answer questions in a timely manner; however, questions submitted within seven (7) calendar days of the proposal due date listed herein may not be answered. DARPA will post a consolidated Frequently Asked Questions (FAQ) document. To access the posting please visit: <a href="http://www.darpa.mil/work-with-us/opportunities">http://www.darpa.mil/work-with-us/opportunities</a>. Under the topic number summary, there will be a link to the FAQ. The FAQ will be updated on an ongoing basis until one week prior to the proposal due date.

Technical support for the Defense SBIR/STTR Innovation Portal (DSIP) is available Monday through Friday, 9:00 a.m. – 5:00 p.m. ET. Requests for technical support must be emailed to DoDSBIRSupport@reisystems.com with a copy to SBIR\_BAA@darpa.mil.

# DARPA SBIR 23.4 Topic Index Release 12

HR0011SB20234XL-05 Project CAPTURE: Capturing Aerial Payloads To Unleash Reliable Exploitation – SBIR XL

OUSD (R&E) CRITICAL TECHNOLOGY AREA(S): Human-Machine Interfaces

OBJECTIVE: Develop and demonstrate a prototype system to capture and recover exploitable payloads from slow speed high-altitude aerial systems of interest within or approaching U.S. sovereign airspace.

DESCRIPTION: Recent incursions of U.S. airspace demonstrated limitations of the ability to recover sensitive payloads from slow-speed high-altitude objects in a manner that is both effective for follow on exploitation and scalable to employment over diverse geographic areas. The military's current ability to respond to slow-moving, high-altitude objects is constrained by physics and the capabilities of current weapons systems. For example, the F-22 is one of few aircraft able to operate at an altitude above 50,000 feet. Additionally, these aircraft travel at hundreds of miles per hour while attempting to identify and target slow-moving or stationary objects. Aerial systems of interest are typically downed in areas of lower risk to humans. These constraints, coupled with current technical capabilities, result in limited engagement opportunities and difficult recovery operations.

The DARPA CHASE effort seeks to rapidly develop and demonstrate an integrated prototype system to capture and retrieve aerial systems of interest flying slowly at high altitudes under positive control in a manner safe to the surrounding area while maximizing exploitation of the captured system. Solutions should address the following unique challenges:

- Aerial systems of interest may range from 500 pounds (threshold) to 1,500 pounds (objective)
- Aerial systems of interest may constitute varying sizes or shapes
- Aerial systems of interest may operate up to 60,000 feet (threshold) to 75,000 feet (objective)
- Captured systems should include the aerial system's payloads (threshold) or the entirety of the aerial system of interest (objective)
- Capture of aerial systems of interest should be in a manner allowing for controlled descent for recovery near inhabited or otherwise currently avoided recovery areas
- Captured aerial systems of interest should be in a condition maximizing the ability for technical exploitation upon recoverySolution response time to aerial systems of interest approaching or within any U.S. sovereign airspace should scale to an order of hours after an engagement decision.

Solutions should take advantage of existing military and commercial logistics infrastructure where possible. Solutions should clearly identify what existing technologies or systems would be used as part of the approach. Examples may include, but are not limited to, involvement of specific slow-moving aircraft or use of surface-based systems. Solutions requiring additional government furnished information, dependencies, or equipment to be potentially provided as part of the solution should be clearly and plainly described for consideration of the proposed approach.

PHASE I: This topic is Direct to Phase II only. The desired system may leverage existing technologies and systems to rapidly integrate into a prototype system in order to demonstrate the desired objective capability. The proposal documentation should address the following areas to demonstrate system readiness to proceed straight to Phase II:

- Design, fabrication, and flight test experience of high-altitude systems that operate above 50,000 ft.
- Pedigree of the proposed concept to include any relevant prior test and analysis activities.

PHASE II: The base period should produce a fieldable prototype final design review that satisfies project objectives in no more than six months after contract award. A follow-on option phase should include a final demonstration no more than 9 to 12 months after contract award. This timeline emphasizes the desire for innovative yet simple development of readily available capabilities. The prototype system may

use or modify existing technologies and operational systems (military or commercial) to rapidly achieve program objectives.

The performer will be expected to provide a Statement of Work (SOW) listing tasks and associated subtasks required to meet the following deliverables commensurate within the stated timeline for this effort:

- Description and analysis of the concept of employment
- Description and analysis of the concept of operations
- System concept and designs to include any modification of existing designs
- Technical, cost, and schedule risk analysis of the proposed approach
- Anticipated risk reduction testing plan and schedule
- Final prototype system hardware, software, and technical data packages
- Field test demonstration

The performer must identify what government information and assets must be made available as part of the development process and system testing (GFI and GFE). It is anticipated that multiple existing military systems may be required for completing the concept of operations. Engagement of these systems and organization functions is also expected to promote the rapid transition of the prototype system. Follow-on options to the base effort are expected to include the rapid incorporation into the operational systems and organizations.

PHASE III DUAL USE APPLICATIONS: Transition partners will be integral to the execution during the Phase II effort due to the rapid and inherent utilization of operational assets requirements.

#### REFERENCES:

- 1. https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/02/16/remarks-by-president-biden-on-the-united-states-response-to-recent-aerial-objects/
- 2. https://www.defense.gov/News/News-Stories/Article/Article/3297104/chinese-surveillance-balloons-global-in-scope-says-official/

KEYWORDS: Manned/unmanned air vehicles; missiles; air capture/retrieval systems

TPOC-1: DARPA SBIR BAA Help Desk

Email: SBIR BAA@darpa.mil

## APPENDIX A: DARPA DIRECT TO PHASE II (DP2) PROPOSAL INSTRUCTIONS

#### I. Introduction

A complete proposal submission consists of:

Volume 1: Proposal Cover Sheet

Volume 2: Technical Volume (feasibility documentation and technical proposal)

Volume 3: Cost Volume

Volume 4: Company Commercialization Report

Volume 5: Supporting Documents

a. Contractor Certification Regarding Provision of Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (Attachment 1) MANDATORY

b. Disclosures of Foreign Affiliations or Relationships to Foreign Countries (Attachment 2) MANDATORY

- c. Verification of Eligibility of Small Business Joint Ventures (Attachment 3), if applicable
- d. Disclosure of Funding Sources (Attachment 4) MANDATORY
- e. Other supporting documentation

A completed proposal submission in DSIP does NOT indicate that the mandatory supporting documents have been uploaded. It is the responsibility of the proposing small business concern to ensure that the mandatory documents listed above have been uploaded and included with the proposal submission.

Volume 6: Fraud, Waste and Abuse Training

The Defense SBIR/STTR Innovation Portal (DSIP) provides a structure for building the proposal volumes and submitting a consolidated proposal package. If this is your first time submitting an SBIR or STTR proposal using DSIP, please review detailed training guides at

https://www.dodsbirsttr.mil/submissions/learning-support/training-materials. It is the responsibility of the proposing firm to ensure that a complete proposal package is certified and submitted by the close date listed in the topic to which they are responding.

To assist in proposal development, templates Volume 3: Cost Volume have been provided as attachments to the announcement posted at <a href="https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program">https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program</a>. Use of this template is mandatory.

NOTE: All proposers are required to submit Volume 4: Company Commercialization Report (CCR).

# II. Proprietary Information

Proposers that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall follow instructions in section 4.5 regarding marking propriety proposal information.

# III. DP2 Proposal Instructions

# a. Proposal Cover Sheet (Volume 1)

The Cover Sheet must include a brief technical abstract of no more than 3000 characters that describes the proposed R&D project with a discussion of anticipated benefits and potential commercial applications.

Do not include proprietary or classified information in the Proposal Cover Sheet. If your proposal is selected for award, the technical abstract and discussion of anticipated benefits may be publicly released.

# b. Content of the Technical Volume (Volume 2) – White Paper & Slide Deck

White Paper (NTE 20 pages). Provide the following information: Goals and Impact: Clearly describe what is being proposed and what difference it will make (qualitatively and quantitatively), including a brief discussion on how this directly relates to the topic.

- 1. Phase I Feasibility: This topic is accepting Direct to Phase II proposals ONLY. To be eligible, proposers must demonstrate that the feasibility requirements outlined in the topic have been met, and achieved outside of the SBIR program.
- 2. Technical Plan: Outline and address all technical areas and challenges inherent in the approach and possible solutions for overcoming potential problems. Provide specific objectives, metrics, and milestones at intermediate stages to demonstrate a plan for accomplishment of the project objectives. Propose additional appropriate qualitative and quantitative metrics specific to the approach, as needed. Intermediary milestones should occur at no greater than 1-month increments.
- 3. Management and Capabilities: Designate key personnel who will be involved in the Phase II effort. Provide a brief summary of expertise of the team, including subcontractors and key personnel. Describe the organizational experience in this technology area, previous work not directly related to the proposed effort but similar, existing intellectual property required to complete the project, and any specialized facilities to be used as part of the project. List Government-furnished materials or data assumed to be available. Describe any specialized facilities to be used as part of the project, the extent of access to these facilities, and any biological containment, biosafety, and certification requirements.
- 4. Transition and Commercialization Plan:
  - a. Describe the commercial product or DoD system to be developed.
  - b. Discuss the potential end users DoD, Federal, and/or private sector customers. Discuss your business model for this technology (i.e., how to you anticipate generating revenue with this technology?). Who are you selling to directly or indirectly, a supplier, an integrator, or an end user?
  - c. Describe your company's funding history. Discuss how much additional funding above this proposed effort (include additional required technology development, staffing requirements, infrastructure requirements, IP strategy costs, etc.) that will be required to bring this technology to market and how you anticipate going about getting that funding (e.g., Govt S&T contracts, investment).
  - d. Describe the timeline to maturity for sales or transition to an end user. Describe your IP strategy.
  - e. Describe the technology, market, team and business risks associated with this proposed effort and your plan to mitigate these risks.

Slide Deck (NTE 15 slides). Provide the following information (convert the completed deck to a pdf and attach it to the white paper):

1. What are you trying to do and how does this directly relate to the topic?

- 2. Technology and commercial product: Specifically, what are you proposing to produce software, system, application? Be specific on what your proposed technology development is targeting as an end state.
- 3. How is the technology approached today? Who is doing the research, development and delivering products/services? What are the current limitations in the technology and commercial marketplaces?
- 4. Technical and commercial value proposition: How have you substantiated the feasibility of your approach? What is innovative in your approach and how does it compare to the state-of-the-art? Why do you think it will be successful both from a technical and commercial perspective? If you are successful what difference will it make? Discuss your proposed business model how do you expect to generate revenue from your technology?
- 5. Technical and commercial risks: What are the key technical and commercial challenges and how do you plan to address/overcome these?
- 6. Technical and commercial market analysis: Who will care and what will the impact be if you are successful? What/who are the markets/industries/integrators/stakeholders that would/should care?
- 7. Cost, schedule and milestones: Provide a summary of your cost volume. Provide a summary of your schedule and milestones. How much will your proposed effort cost in total? How long will it take? What are your technical milestones for achieving the proposed efforts? What are your transition and commercialization plan milestones? Discuss how much funding will be required to bring your proposed technology to market and execute on your proposed transition and commercialization plan. Include any funding raised to date and expected plans for raising any additional required funding (government contracting revenue, product sales, internal R&D investment, loan, angel or Venture Capital investment, etc.). Describe timeline to maturity for operational use or commercial sales.
- 8. Management: Overview of team, facilities and qualifications.
- 9. Technical summary quad chart: Use template provided at <a href="https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program">https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program</a>.
- 10. Commercialization summary quad chart: Use the DARPA Transition and Commercialization Strategy Plan (TCSP) template, located at <a href="https://www.darpa.mil/work-with-us/for-small-businesses/commercialization-continued">https://www.darpa.mil/work-with-us/for-small-businesses/commercialization-continued</a>.

NOTE: All letters of recommendation and CVs can be loaded in Volume 5: Supporting Documents.

# c. Format of Cost Volume (Volume 3)

Proposers are required to use the Direct to Phase II – Volume 3: Cost Proposal Template (Excel Spreadsheet) provided as an attachment to this announcement. The Cost Volume (and supporting documentation) DOES NOT count toward the page limit of the Technical Volume.

# d. Content of the Cost Volume (Volume 3)

Some items in the Cost Breakdown Guidance below may not apply to the proposed project. If such is the case, there is no need to provide information on each and every item.

ALL proposed costs should be accompanied by documentation to substantiate how the cost was derived. For example, if you proposed travel cost to attend a project-related meeting or conference, and used a travel website to compare flight costs, include a screen shot of the comparison. Similarly, if you proposed to purchase materials or equipment, and used the internet to search for the best source, include your market research for those items. You do not necessarily have to propose the cheapest item or supplier, but you should explain your decision to choose one item or supplier over another. It's important to provide enough information to allow contracting personnel to understand how the proposer plans to use the requested funds. If selected for award, failure to include the documentation with your proposal will delay contract negotiation, and the proposer will be asked to submit the necessary documentation to the Contracting Officer to substantiate costs (e.g., cost estimates for equipment, materials, and consultants or subcontractors). It is important to respond as quickly as possible to the Contracting Officer's request for documentation.

#### Cost Breakdown Guidance:

- 1. List all key personnel by name as well as by number of hours dedicated to the project as direct labor. Special tooling and test equipment and material cost may be included. The inclusion of equipment and material will be carefully reviewed relative to need and appropriateness for the work proposed. The purchase of special tooling and test equipment must, in the opinion of the Contracting Officer, be advantageous to the Government and should be related directly to the specific topic. These may include such items as innovative instrumentation and/or automatic test equipment. Title to property furnished by the Government or acquired with Government funds will be vested with DARPA; unless it is determined that transfer of title to the contractor would be more cost effective than recovery of the equipment by the DARPA.
- 2. Cost for travel funds must be justified and related to the needs of the project.
- 3. Cost sharing is permitted for proposals under this announcement; however, cost sharing is not required nor will it be an evaluation factor in the consideration of a proposal.
- 4. All subcontractor costs and consultant costs must be detailed at the same level as prime contractor costs in regard to labor, travel, equipment, etc. Provide detailed substantiation of subcontractor costs in your cost proposal. Enter this information in the Explanatory Material section of the online cost proposal form. The Supporting Documents Volume (Volume 5) may be used if additional space is needed.

For more information about cost proposals and accounting standards, see the DCAA publication titled "Audit Process Overview – Information for Contractors" available at: http://www.dcaa.mil.

# e. Company Commercialization Report (Volume 4)

The Company Commercialization Report (CCR) allows companies to report funding outcomes resulting from prior SBIR and STTR awards. The Company Commercialization Report (CCR) is required for Phase I and Direct to Phase II proposals. Please refer to the DoD STTR Program BAA for full details on this requirement. Information contained in the CCR will not be considered by DARPA during proposal evaluations.

# f. Supporting Documents (Volume 5)

In addition to required DoD documentation and certifications, small businesses may also submit additional documentation to support the Technical Volume (Volume 2) and the Cost Volume (Volume 3) in Volume 5. Firms should fill out and upload the DARPA SBIR XL Milestones Template found on the DARPA Small Business website under SBIR/STTR BAA FORMS & TEMPLATES at <a href="https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program">https://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program</a>. See Appendix A

Introduction for **required** certifications that must be included in Volume 5. For additional information, see the SBIR 23.4 Annual Program Broad Agency Announcement (BAA) at <a href="https://www.defensesbirsttr.mil/SBIR-STTR/Opportunities/">https://www.defensesbirsttr.mil/SBIR-STTR/Opportunities/</a>.

### g. Fraud Waste and Abuse (Volume 6)

The Fraud, Waste and Abuse (FWA) training is required for Phase I and Direct to Phase II proposals. FWA training provides information on what represents FWA in the SBIR/STTR program, the most common mistakes that lead to FWA, as well as the penalties and ways to prevent FWA in your firm. This training material must be thoroughly reviewed once per year. Plan ahead and leave ample time to complete this training based on the proposal submission deadline. Knowingly and willfully making any false, fictitious, or fraudulent statements or representations may be a felony under the Federal Criminal False Statement Act (18 U.S.C. Sec 1001), punishable by a fine of up to \$10,000, up to five years in prison, or both. Understanding the indicators and types of fraud, waste, and abuse that can occur is critical for the SBIR/STTR awardees' role in preventing the loss of research dollars.